

Amendment to the Specification

Please amend the specification at page 5, lines 14-24 as follows:

If multiple backup systems are connected to the UPS system, then additional diode bridge/auxiliary converter pairs are needed. Additional boost converters are not needed because only one backup system can provide power to the load at a time. Therefore, when the UPS system is in backup mode, the software unit selectively connects one of the diode bridge/auxiliary converter pairs to the boost converter. If needed, the software unit can switch over to the other backup system by connecting the diode bridge/auxiliary converter pair associated with that other backup system.

Please amend the specification at page 8, line 26 through page 9, line 7 as follows:

Inverter 40 may operate to provide "clean" power to the load regardless of ~~the~~ whether the power is provided by a power company (e.g., utility) or a backup system. During normal mode operation (i.e., UPS system 10 is providing utility power to the load), the power signal provided by the utility may be conditioned or regulated by inverter 40. Inverter 40 may, for example, condition the power provided to

the load by attenuating unwanted harmonics. Furthermore, inverter 40 may also be used to provide power to the backup system via DC bus 30. This power may be directed by auxiliary converter 130 to one or more backup systems such that each system is maintained in a ready state (e.g., a ready state that enables the backup system to provide substantially instantaneous backup power on demand).

Please amend the specification at page 12, lines 11-30 as follows:

FIG. 1 also illustrates that two or more backup power systems can be connected to universal UPS input circuitry 100. As shown, each additional backup system is coupled to another instance of universal interface 150 (shown as interface 152 on the second circuit), which is further associated with another diode bridge/auxiliary converter pair. Additional boost converters are not needed for each backup system because only one backup system can provide power to the load at a time. Therefore, when the UPS system is in backup mode, software unit 160 selectively connects one of the diode bridge/auxiliary converter pairs to the boost converter ~~180~~ 120. If needed, software unit 160 can switch another backup system by connecting an associated diode

bridge/auxiliary converter pair to boost converter 120. Such a multiple backup power supply arrangement can, for example, advantageously provide immediate short-lived power (e.g., from a battery backup power system) and also provide long-term power (e.g., from a VSCF backup power system) to the load if utility power fails.

Please amend the specification at page 12, line 31 through page 13, line 15 as follows:

If two or more backup power supplies are coupled to universal UPS input circuitry, software unit 160 may provide multiple channels (e.g., one for each backup system) so that each backup power system receives operational signals. For example, it may be necessary for each backup power supply to be kept in a relatively constant ready state. Consider, for example, a UPS system coupled to a flywheel-based backup system and a VSCF backup system. In such a configuration, software unit 160 can provide both of these systems with the requisite operational signals to maintain each system in a constant ready state. Thus, during backup mode, either backup system can be selected to provide power to a load because each backup system is maintained in a constant ready state. Persons skilled in the art will appreciate that

software unit 160 may be capable of providing operational signals to any number of backup systems coupled to a UPS system.

Please amend the specification at page 23, lines 18-28 as follows:

If desired, any additional backup power system (e.g., backup system 752) may be coupled to input circuitry 710 to provide backup power. For example, if a battery backup power system is implemented with UPS system 700, then input circuitry 710 may be populated with a diode bridge, boost converter, and auxiliary converter in slots 725, 726, and 727, respectively. Once slots 725, 726, and 727 are filled, input circuitry 710 may be able to properly interface with the battery backup power system and provide UPS system 700 with backup power.